UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.		FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,70	00	09/22/20	000	Joachim Kim	44400.010100	2337
33893 JLB CC		7590 FING, INC.	EXAMINER			
c/o INT	ELLEV	ATE			USTARIS, JOSEPH G	
P.O. BOX 52050 MINNEAPOLIS, MN 55402					ART UNIT	PAPER NUMBER
17111111	Ministra Obio, ini 55 102				2623	
					MAIL DATE	DELIVERY MODE
					08/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
	09/668,700	KIM, JOACHIM					
Office Action Summary	Examiner	Art Unit					
	Joseph G. Ustaris	2623					
The MAILING DATE of this communication	•						
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory per  - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).	B DATE OF THIS COMMUNIC R 1.136(a). In no event, however, may a re- riod will apply and will expire SIX (6) MON atute, cause the application to become AB	CATION.  eply be timely filed  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on O	<u>5 June 2007</u> .						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ T	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>75-87</u> is/are pending in the applica	Claim(s) <u>75-87</u> is/are pending in the application.						
4a) Of the above claim(s) is/are without	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>75-87</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction an	d/or election requirement.						
Application Papers							
9) The specification is objected to by the Exam	niner.						
10)⊠ The drawing(s) filed on <u>15 November 2004</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.							
Applicant may not request that any objection to	- · · · · · · · · · · · · · · · · · · ·						
Replacement drawing sheet(s) including the cor							
11) The oath or declaration is objected to by the	e Examiner. Note the attached	Office Action or form P1O-152.					
Priority under 35 U.S.C. § 119							
12) ☐ Acknowledgment is made of a claim for fore a) ☐ All b) ☐ Some * c) ☐ None of:	eign priority under 35 U.S.C. §	119(a)-(d) or (f).					
1. Certified copies of the priority docum	ents have been received.	·					
2. Certified copies of the priority docum		pplication No					
3. Copies of the certified copies of the p	oriority documents have been	received in this National Stage					
application from the International Bur	reau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a	list of the certified copies not	received.					
Attachment(s)	,						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>	· · · · · · · · · · · · · · · · · · ·	Summary (PTO-413) s)/Mail Date					
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>		nformal Patent Application					

Application/Control Number: 09/668,700 Page 2

Art Unit: 2623

### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 5, 2007 has been entered.

### Claim Objections

- 2. Claims 78-81 and 85 are objected to because of the following informalities:
  - Claims 78-81 and 85 recite "The media content transformer" while other dependent claims recite "The transformer". The examiner suggests using consistent language throughout the claims.
  - Claim 78 depends on canceled claim 74. The examiner will assume that claim 78 depends on claim 75.

Appropriate correction is required.

Claims 78-81 and 84-86 are objected to under 37 CFR 1.75.

Claim 78 recites the limitations "the media content transformer" and
 "said media content transformer" in lines 1 and 3. There is insufficient
 antecedent basis for this limitation in the claim.

Application/Control Number: 09/668,700 Page 3

Art Unit: 2623

 Claim 79 and 85 recites the limitations "the media content transformer" and "the time-sequence of digital frames" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

- Claim 80 recites the limitation "the media content transformer" in line 1.
   There is insufficient antecedent basis for this limitation in the claim.
- Claim 81 recites the limitation "the media content transformer" in line 1.
   There is insufficient antecedent basis for this limitation in the claim.
- Claim 84 recites the limitation "said media content transformer" in line
  There is insufficient antecedent basis for this limitation in the claim.
- Claim 84 is objected to as being a substantial duplicate of claim 78
- Claim 85 is objected to as being a substantial duplicate of claim 79.
- Claim 86 recites the limitations "said data storage device", "said at least one media content block", and "said media content identifier" in lines 1-3. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

<sup>(</sup>b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Application/Control Number: 09/668,700

Art Unit: 2623

Claim 86 is rejected under 35 U.S.C. 102(b) as being anticipated by Ottesen et al. (US005930493A).

Regarding claim 86, Ottesen et al. (Ottesen) discloses a network (See Figs. 2-3) comprising:

a plurality of servers (See col. 8 lines 28-33, distribution resources provided at a plurality of sites) including at least one distribution server (See Fig. 3, 30) coupled to said data storage device (See Fig. 3, 40) and adapted to retrieve said at least one media content block (See Figs. 5 and 6) based upon said media content identifier (See col. 9 line 60 – col. 10 line 10).

### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 75-85 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al. (US005930493A) in view of Shirakawa et al. (US006539164B2).

Regarding claim 75, Ottesen et al. (Ottesen) discloses a transformer (See Fig. 3, 30) comprising:

a converter (See Fig. 3, 33) including an input for receiving media content (multimedia programs) formatted according to at least one of a plurality of media

Application/Control Number: 09/668,700

Art Unit: 2623

formats (See col. 7 lines 25-67), said converter providing at least one media block corresponding to at least a portion of said media content (See Figs. 5 and 6; col. 9 lines 25-45), said converter providing a corresponding media block identifier (address identifier) for said at least one medial block (See col. 9 line 60 – col. 10 line 10);

a storage managing unit (See Fig. 3, 40) coupled to said converter to receive said at least one media block and said at least one media block identifier, said storage manager providing a corresponding storage address (address table) for said at least one media block (See col. 10 lines 1-3);

a translator (See Fig. 3, 40; wherein the unit 40 serves the function of the translator) configured to provide said storage address based upon said media block identifier (See col. 9 line 60 – col. 10 line 10);

said transformer thereby enabling retrieval of stored media content based upon said media block identifier (See Fig. 3; col. 9 line 60 – col. 10 line 10).

However, Ottesen does not explicitly disclose that wherein said at least one media block begins with an integral frame.

Ottesen does disclose that the MPEG coding standard is one of many coding techniques that is used (See Ottesen column 7 lines 42-65). Shirakawa et al. (Shirakawa) discloses a system for recording/playback of video using MPEG standards. The video is coded into a plurality of group of pictures (GOPs) or "media blocks" that consists of frames (See Figs. 1a and 43). Each GOP begins with an intra-frame (I-frame) or "integral frame" (See Figs. 1a and 43; column 24 lines 22-37 and column 25 line 30 – column 26 line 30). Therefore, it would have been obvious to one with ordinary

skill in the art at the time the invention was made to modify each of the media blocks disclosed by Ottesen to begin with a "integral frame", as taught by Shirakawa, in order to enable high-speed retrieval and display of any selected image that is recorded on the storage device (See Shirakawa column 6 lines 39-41, column 8 lines 62-63, and column 26 lines 11-14).

Regarding claim 76, said converter (See Fig. 3, 33) input is coupled to the output of an encoder (See Fig. 3, 32) selected from the group comprising: MPEG (See Ottesen col. 7 lines 25-67 and col. 9 lines 26-30), AVI and DIVX.

Regarding claim 77, said media block is addressable by a start time indicator (time code) (See Shirakawa col. 2 lines 15-26).

Regarding claim 78, at least one encoder (See Ottesen Fig. 3, 32) coupled to said transform unit (See Ottesen Fig. 3, 30) to provide media content comprising a time-sequence of digital frames to said media content transformer (See Ottesen col. 7 lines 25-67 and col. 9 lines 26-30; where inherently MPEG encoding provides time-sequence of digital frames).

Regarding claim 79, wherein said transformer (See Ottesen Fig. 3, 30) is configured to transform time-sequence of digital frames into one or more sequential media blocks (See Ottesen Figs. 5 and 6; col. 9 lines 25-45), each of the sequential media blocks comprising data representing a consecutive integral number of digital frames selected from the group comprising full frames and delta frames (See Ottesen col. 7 lines 42-65 and col. 9 line 66 – col. 10 line 38; the segments contain

consecutively ordered full-motion video encoded with MPEG standard where the digital frames are selected from I-frames and P- and B-frames).

Regarding claim 80, each media block begins with a whole frame (an I-frame is a whole frame) (See the rejection of claim 75).

Regarding claim 81, a storage manager (See Ottesen Fig. 3, 40; wherein the unit 40 serves the function of the storage manager) for determining a storage address (address table and physical storage location) for each of the sequential media blocks (See Ottesen col. 10 lines 1-3);

a storing processor (See Ottesen Fig. 3, 40; wherein the unit 40 serves the function of the storing processor) for storing each sequential media block at the storage address determined by said storage manager (See Ottesen col. 9 line 60 – col. 10 line 10).

Regarding claim 82, said converter (See Ottesen Fig. 3, 33) input is coupled to the output of an MPEG encoder (See Ottesen Fig. 3, 32; col. 7 lines 25-67 and col. 9 lines 26-30).

Claims 83-85 and 87 contains the limitations of claims 77-79 and 75 respectively and is analyzed as previously discussed with respect to those claims.

# Response to Arguments

5. Applicant's arguments with respect to claims 75-87 have been considered but are moot in view of the new ground(s) of rejection.

Application/Control Number: 09/668,700

Art Unit: 2623

#### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph G. Ustaris whose telephone number is 571-272-7383. The examiner can normally be reached on M-F 7:30-5 PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JGU

August 9, 2007

CHRIS RELLEY
SUPERVISORY PATENT EXAMINER

Page 8

TECHNOLOGY CENTER 2600